

REMARKS

Claims 13-16, 19, 24, 45, 50, 60, 65, 69, 74, 80, 84, 89, 95, 101, 107, 112 and 116-142 are pending in the present application.

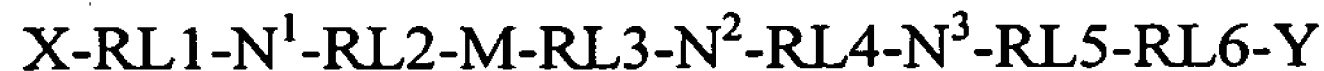
At the outset, Applicants wish to thank Examiner Snedden for the helpful and courteous discussion with their undersigned Representative on September 8, 2004. During this discussion, several amendments and arguments were discussed to address the outstanding rejections. The content of this discussion is reflected in the amendments and remarks set forth herein. Reconsideration is respectfully requested.

The rejection of Claims 13-17, 19, 43, 45, 46, 69, and 70 under 35 U.S.C. §102(b) over Kaplan et al is obviated by amendment.

Kaplan et al discloses the full-length sequence of human endonexin II (approximately 320 amino acids; see Figure 1). However, at no point do Kaplan et al disclose or suggest the presently claimed polypeptides of formula VII, much less their affinity for phospholipids. Applicants note that they are the first to identify and clearly define the phospholipids site and to define an active artificial peptide that is shorter than the full-length annexin (approximately 70 amino acids). This discovery is important due to the importance that lipids play in cellular signaling (see page 1 of the present specification). Accordingly, the present invention provides, *inter alia*, an in vitro diagnostic for detection of pathologies involving the occurrence of negative charges at the surface of cells and release of microvesicles into the blood, as well as detection of thrombotic areas upon vascular accidents.

It appears that the Examiner has interpreted the previously pending claims as reading on a linear sequence “comprising” the polypeptide of formula VII and, therefore, the

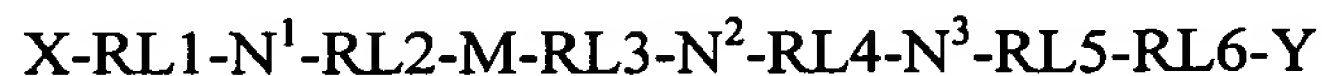
previously claimed invention as not being limited to the specific polypeptide of formula VII. More specifically, it appears that the Examiner has interpreted original Claim 13 to read on the full sequence of annexin. To clarify the claimed invention and the distinction between the same and the disclosure of Kaplan et al, Applicants have: (a) amended Claim 13 to specifically relate to cyclic polypeptides comprising formula VII, and (b) introduced new Claim 116 drawn to an isolated polypeptide *consisting of* a sequence with the following formula:



wherein N¹ to N³ each independently represent 1 to 4, independently selected, natural or non-natural, amino acids and wherein M is a peptide consisting of 1 to 100 natural or non-natural amino acids; wherein RL1, RL2, and RL3 are independently selected from Lys, Arg or Orn; RL4 and RL6 are independently selected from Asp or Glu; and RL5 is independently selected from Ser, Thr, Asp, or Glu; and wherein X is a sequence of 9-11 amino acids and Y is a sequence of 14-19 amino acids.

Applicants note that Kaplan et al is silent with respect to cyclic polypeptides (Claims 13-16, 19, 24, 45, 50, 60, 65, 69, 74, 80, 84, 89, 95, 101, 107, and 112) containing formula VII as the sequences disclosed therein are all linear (see for example Figure 1). The standard for determining anticipation requires that the reference “must teach every element of the claim” (MPEP §2131). Therefore, the silence of Kaplan et al in regard to cyclic polypeptides comprising formula VII would necessarily make this reference fail to meet this standard and, thus, not anticipate the invention in Claims 13-16, 19, 24, 45, 50, 60, 65, 69, 74, 80, 84, 89, 95, 101, 107, and 112.

In regard to Claims 116-142, as stated above, Kaplan et al merely discloses the full-length sequence of human endonexin II. At no point do Kaplan et al disclose or suggest the claimed fragment having the formula:



wherein N^1 to N^3 each independently represent 1 to 4, independently selected, natural or non-natural, amino acids and wherein M is a peptide consisting of 1 to 100 natural or non-natural amino acids; wherein RL1, RL2, and RL3 are independently selected from Lys, Arg or Orn; RL4 and RL6 are independently selected from Asp or Glu; and RL5 is independently selected from Ser, Thr, Asp, or Glu; and wherein X is a sequence of 9-11 amino acids and Y is a sequence of 14-19 amino acids. Therefore, Kaplan et al necessarily fails to satisfy the requirements of MPEP §2131 to support an anticipation rejection.

Based on the foregoing, Applicants submit that the rejection over Kaplan et al should be withdrawn. Acknowledgement to this effect is requested.

The objection to Claim 11 is obviated, in part, by cancellation of Claim 17. In regard to the non-elected subject matter appearing in Claim 16, Applicants note that this subject matter corresponds to species that are unified by the elected, generic formula VII. As such, the Examiner should expand his search once the elected species (Arg 25 to Glu72 of SEQ ID NO: 2) is found allowable. Acknowledgement that this objection has been withdrawn is requested.

The objection to the drawings is obviated by submission of replacement Figure 6B herewith. Acknowledgement that this objection has been withdrawn is requested.

Finally, Applicants remind the Examiner that MPEP §821.04 states:

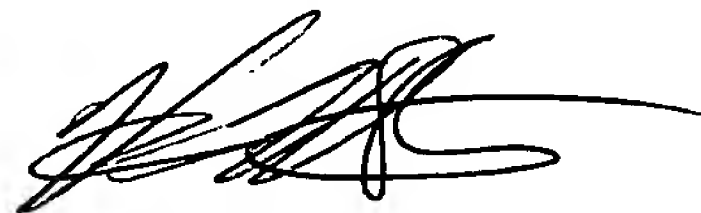
...if applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims which depend from or otherwise include all the limitations of the allowable product claim *will* be rejoined. (*emphasis added*)

Upon a finding of allowability of the elected product claims, Applicants respectfully request rejoinder of the withdrawn process claims. Moreover, Applicants note that Claims 84, 89, 95, 101, 107, and 112 depend from Claim 13 and, as such, with the allowability of Claim 13 these claims would share the same point of novelty. Therefore, once the elected product claims are found allowable, Applicants submit that Claims 84, 89, 95, 101, 107, and 112 should also be rejoined.

Applicants respectfully submit that the above-identified application is now in condition for allowance, and early notice of such action is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.
Norman F. Oblon



Vincent K. Shier, Ph.D.
Registration No. 50,552

Customer Number

22850

Tel: 703-413-3000
Fax: 703-413-2220
NFO:VKS

AMENDMENTS TO THE DRAWINGS

The Examiner indicated objections to the drawings (Figure 6B) filed on June 25, 2001. The replacement drawing for Figure 6B filed herewith is believed to contain all of the necessary corrections.

Attachment: Letter Submitting Drawing Sheet(s) / One (1) Replacement Drawing